



DELAWARE WOMEN AND THE CONSTRUCTION TRADES: A PATH TO ECONOMIC SECURITY

February 2023

INTRODUCTION

The global COVID-19 pandemic has had wide-ranging and significant economic impacts on the state, and Delaware women have been and continue to suffer the adverse effects due to their disproportionate representation in roles as hospital or home health workers, those in the service industry, or caregivers of both children and aging parents. Delaware women have borne the brunt of the pandemic disruption: job loss, lack of childcare, school closures, caring for loved ones. In the wake of the pandemic's traumatic impact on women, now, more than ever, it is imperative that Delaware women have access to stable, well-paying jobs that can support them and their families. The objective of this report is to highlight the role that jobs in the construction industry can play in providing women with economic and social empowerment, economic equity, and self-sufficiency.

The construction trades industry is facing a long-term labor shortage, with 55% of contractors reporting high difficulty finding skilled workers in the most recent quarter.[1] In addition, the workforce is aging, and most younger workers are attending college or choosing careers in tech, retail and hospitality.

Filling this increasing skills gap can be difficult, especially when the potential pool of applicants historically consists of one gender. The perception that skilled trades should be performed by men still exists but in reality, women are excelling in these traditionally male-dominated careers.

Most jobs within the industry ranging from electricians to carpentry to plumbers, are acquired through training and apprenticeships and do not require a college degree. While jobs within the construction trades industry require training and credentials, they also pay significantly more than industries with similar educational requirements.[2] Despite the societal value that female-dominated industries with similar education requirements bring, such as retail, home health care, and hospitality, positions in those industries tend to pay substantially lower wages and offer fewer benefits. By analyzing the current construction trades landscape in Delaware and examining factors that account for the low number of women in skilled trades, recommendations outlined in this report may help remove some of these barriers and highlight the need to expand opportunities.



Defining the Construction Trades

Those in the construction trades have or are gaining technical knowledge and skills related to the building, inspecting, and maintaining of structures and related properties. Occupations may include those in carpentry, electrical, plumbing, sheet metal, mechanics, HVAC technicians, machinists, as well as others related to power transmission installation, building/construction finishing, management, inspection and other construction-related applications.

DELAWARE WOMEN ARE UNDERREPRESENTED IN CONSTRUCTION TRADES

As in many states in the U.S., Delaware has very few women working in the construction trades industry. U.S. Census data used in this report defines the construction industry broadly and includes several industry categories including those working in any role within construction and extraction; installation, maintenance and repair; and farming, fishing, and forestry. Using this definition, in 2019 there were 40,486 construction industry jobs in Delaware, of which women made up just 9.3%.[3] Additionally, of women working in the construction industry, only 6% were women of color.[4] Compared to states in our region, the percentage of women in the construction industry is similar to New Jersey and Pennsylvania (both 9.2%) but lower than Maryland and the national average, at 13.1% and 10.6% respectively.[5] Moreover, women of color are represented in construction occupations at higher levels. For example, Maryland's construction workforce is 13.1% female, with women of color representing 27.1%, more than four times higher than the number in Delaware.[6] The same is true nationally. Women of color working in the trades represent 17% of the female construction workforce, nearly three times the number in Delaware.[7] While the overall construction industry includes some 3,700 women, recent data show that the number of women in particular construction trade occupations is smaller. For example, Delaware women represent 3% of construction and extraction occupations (such as plumbers, carpenters, and electricians) and 3.2% of installation, maintenance, and repair occupations (such as mechanics, HVAC-R technicians, and line installers).[8]

Number and Percent of Women in the Construction Industry Delaware, Surrounding States, and the U.S.

	DE		NJ		MD		PA		US
Total	40,486		328,149		257,340		476,799		13,135,083
# of Women	3,764		30,085		33,683		44,064		1,392,495
# of Women of Color	231		6,190		9,119		2,698		236,470
% of Women	9.3%		9.2%		13.1%		9.2%		10.6%
% of Women of Color	6.1%		20.6%		27.1%		6.1%		17.0%

*Women of color as a % of all women in construction

Source: ACS 1-Year Estimates 1-Year Estimates-Public Use Microdata Sample 2019

It is important to review data in the context of differing definitions for the construction/trades given the Federal agency gathering the data. The underrepresentation of women in the construction trades is brought into sharp focus when comparing their participation in other non-traditional careers for women. The U.S. Census categorizes the construction industry broadly and includes positions such as sales and administrative roles within the industry. A narrower definition of the construction industry by the Bureau of Labor Statistics (BLS) outlines much smaller numbers. For example, recent BLS data indicate there are 24,100 or 5.4% of all Delaware workers employed in the construction and extraction fields.[9] Under that narrower definition, women make up just 4.4% of those in the construction and extraction workforce.[10] By contrast, there are higher numbers of women participating in other non-traditional fields.

Today, women represent 28% of firefighters and fire prevention, 26.2% of law enforcement, and 11.3% of farming, fishing, and forestry occupations.[11] Based on the data, women are willing and do work in traditionally male-dominated fields. The low number of women in construction and extraction occupations highlights a need to evaluate the factors that are impacting the representation of women in these occupations.

Delaware Women in Non-Traditional Careers



Source: 2019 American Community Survey 5-Year Estimate, US Census Bureau

Given the impact of COVID-19 which has highlighted gender as a factor in job disruption, increasing the number of women in the trades is a matter of equity, as women are overrepresented in low-wage jobs, must contend with the gender wage gap, and were disproportionately forced out of the labor force during the pandemic. For women of color, creating a path to the construction industry can be even more challenging. Meaningful and sustained work to eliminate barriers is needed.

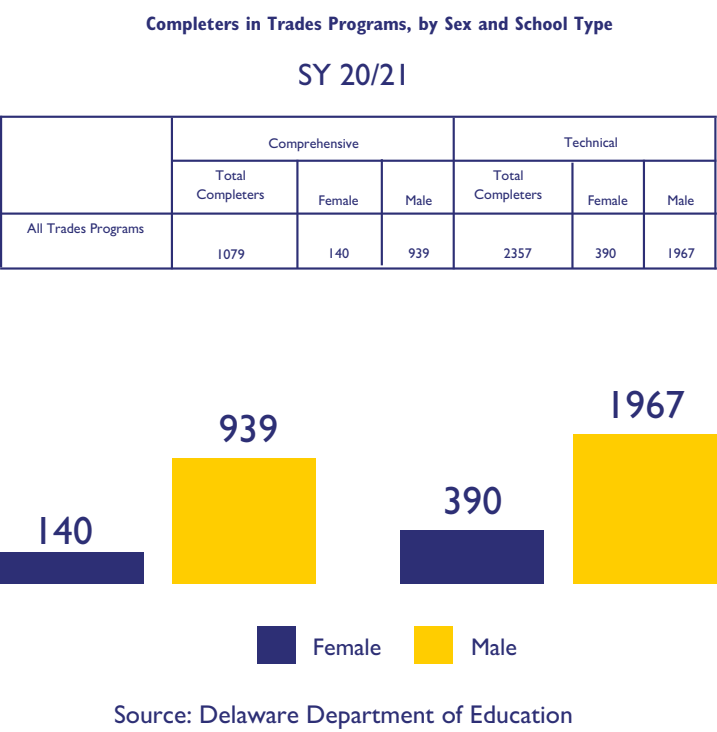
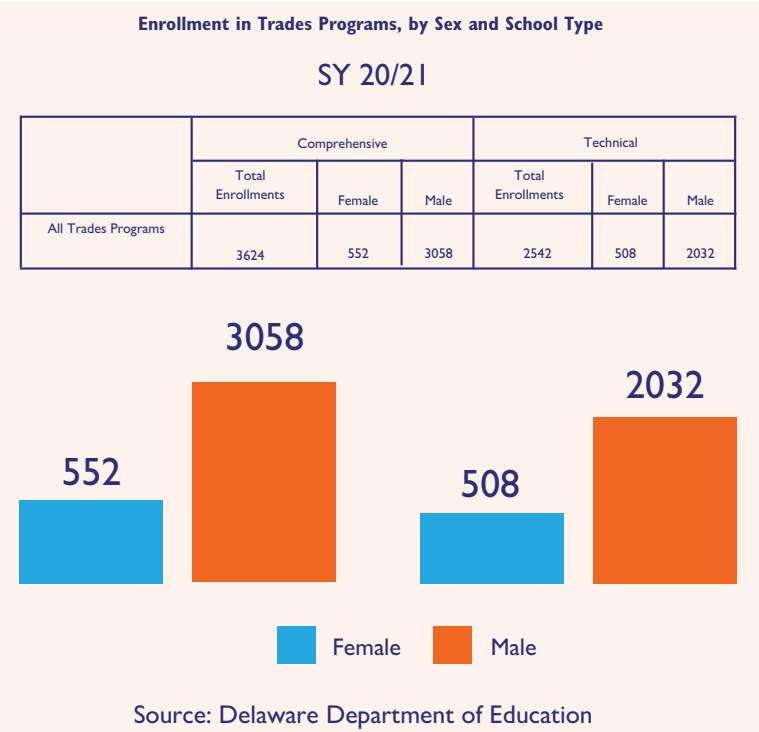
DELAWARE GIRLS STUDYING THE CONSTRUCTION TRADES

As outlined above, there are few women working in the construction trades. Fortunately, more Delaware girls are studying these occupations at the high school level. Like their adult counterparts, girls are still underrepresented overall, but there are more girls exploring and exposed to these occupations compared to the actual number of women working in the industry. Career and Technical Education (CTE) programs allow Delaware students the chance to earn early college credits, industry-recognized credentials, and work experience while still in high school. Trade programs are operationally defined by the Delaware Department of Education as identified Career and Technical Education programs in the agriculture, construction, information technology, manufacturing, and transportation career clusters. There are three vocational technical school districts in Delaware: New Castle County Vocational-Technical School District which is home to four schools, as well as POLYTECH School District and Sussex Technical School District, each with one school.

Data provided by the Delaware Department of Education show that for the 2020/21 school year, traditional high schools enrolled 552 Delaware girls or 15% of program enrollment in trades programs.[12] For technical high schools, 508 Delaware girls or 20% of trades program enrollment were in these programs in the same school year.[13] Drilling down to bring these statistics further into focus requires a distinction between the terms “concentrator” and “completer.” A “concentrator” is defined as a student who has completed at least two courses in a single identified trades program. Concentrators are identified using student course completion data. Comprehensive and technical schools show similar patterns in that Delaware girls represent 13% and 14% respectively of concentrators in trades programs during the 20/21 school year.[14] However, for “completers,” those students who have successfully completed the entire identified trades program, Delaware girls represent just 13% of students who complete a trades program in a comprehensive school. The percentage of girls completing a trades program in a technical school is higher at 17%.[15] A look at the career clusters, a grouping of occupations and industries related by skills or products within trades programs illustrates how enrollment for girls is concentrated in the architecture & construction and manufacturing clusters in both traditional and technical high schools. In the technical schools, over a quarter of the information technology cluster is composed of girls, much higher than those in construction and extraction clusters.[16]



Opportunities to pursue an occupation in the construction trades while in high school provides access to options that a student may not have previously considered. While larger than the number of women working in the construction trades, the small number of girls participating in construction-related pathways indicate that girls may not be considering such a pathway. However, the data clearly indicates that Delaware girls are much more likely to explore and complete a trades program compared to women employed in apprenticeships or construction occupations. Cultural shifts away from the gendering of certain occupations can have long-term impacts on not only the occupations that people choose, but also on the gender wage gap.[17] Male-dominated fields tend to have higher median incomes, while female-dominated fields typically offer much lower wages. [18]



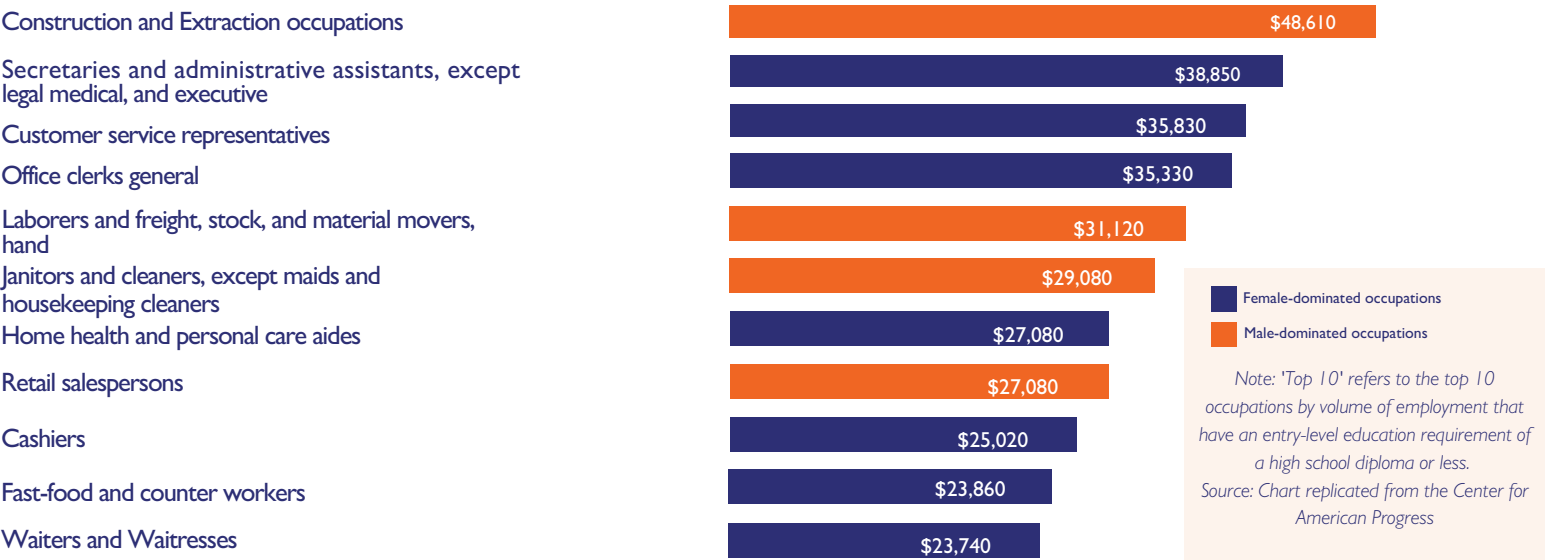
CONSTRUCTION TRADES CAN OFFER A PATH OUT OF POVERTY FOR DELAWARE WOMEN

Delaware women are more likely than men to live in poverty. Of the people living in poverty in the state, 58% were women.[19] Overall, 12% of all women in Delaware live in poverty (compared to 10% of men).[20] For women of color and single mothers, the percentages are much higher. For example, 18% of Black women live in poverty compared to just 10% of white women.[21] For Delaware families, while over 30,000 families live in poverty, 59% of those families are single mothers. [22]



In Delaware, as in other states, there is a persistent gender wage gap. Bureau of Labor Statistics data on median earnings point out that in Delaware, for every \$1.00 that white men make, white women earn \$.82 Black women \$.73, and Latinas \$.65.[23] The gender wage gap exists in Delaware across all education levels. Women who do not graduate from high school earn nearly \$20,000 less annually than men that do not graduate, while women who graduate from high school earn roughly \$12,000 less annually than men with the same education, and those with a bachelor’s degree make \$16,000 less per year compared to men with the same degree.[24] Research has shown that not only is the wage gap smaller in construction occupations, but the annual income for these jobs is much higher than female-dominated jobs that do not require a college degree.[25] For example, in 2019, the average annual salary of occupations in construction was \$52,750 while the average annual waiter/waitress salary was less than half at \$ 25,150.[26] While the wage gap still exists within these occupations, the opportunity for a family-sustaining wage, albeit still less than men, is crucial for the economic security of Delaware women. Occupations in the construction trades not only offer more wage parity but also offer a wage that can meet the increasing costs of housing, childcare, and other basic necessities. Wage equality is central to gender equity and increasing opportunities and access to jobs within the construction industry for women can help to achieve it.

Construction pays better than the top 10 jobs with similar education requirements
Median annual wages for select occupations, 2020



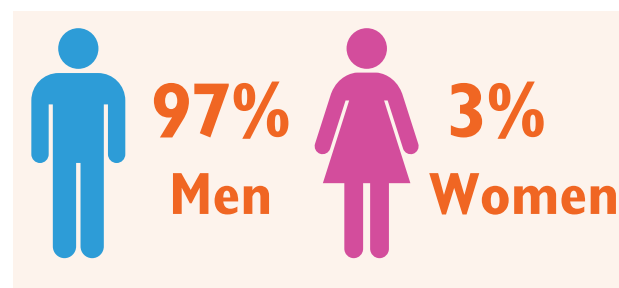
CURRENT DELAWARE PROGRAMS

Registered Apprenticeship (RA) is a program overseen by the Delaware Department of Labor and serves as the state's credentialing and registering agency. According to the Delaware Department of Labor, "It is an employer-driven, 'earn while you learn' model that combines on-the-job training with job-related classroom/lab instruction." [27] The program allows workers who are sponsored by their employer to learn a chosen trade. The program requires education and hands-on training on the job under the supervisor and the guidance of a mentor (skilled person within the trade) as well in an academic or classroom/virtual learning setting. One of the best aspects of the program is that as a Registered Apprentice increases their skills, they also experience an increase in wages. During the apprenticeship, which can last from one to five years depending on the trade, an apprentice learns valuable skills and gains work experience which translates to higher wages. Delaware's Registered Apprenticeship programs receive funding support from the State of Delaware's General Fund and federal funds when available. Corporate sponsors may also contribute to their Registered Apprenticeship Programs. As of February 2022, the Delaware Department of Labor reports that there are 1,696 apprentices registered with the program, 418 employers with at least one registered apprentice, and over 23 occupations included in the program. [28] The top six occupations offered by the program are electricians, plumbers, pipefitters, and steamfitters, HVAC, sheet metal workers, and construction laborers. [29] Mirroring the trends in secondary, postsecondary, and occupational data, the percentage of active apprentices that are women is very small at 3%. [30] The overwhelming majority of apprentices are male and white (72%). [31]

Delaware's Registered Apprenticeship Program



Delaware's Registered Apprentices by Gender



Source: Delaware Department of Labor

Another Delaware program that works in conjunction with the Registered Apprentice Program is Project Employment Blueprint (PEB), which was developed by the Delaware Department of Labor, in partnership with the vo-tech school districts. The Project Employment Blueprint Program prepares trade students by providing one year of Related Technical Instruction (RTI), which may be applied to an RA skilled trade program. [32] A majority of Registered Apprenticeships in the construction trades are at least four-year programs. [33] A four-year program requires that an RA complete 8,000 hours of On-the-Job Training (OJT) and for each year of training, a minimum of 144 hours of RTI. In addition, it requires the apprentice to be employed and the employers to agree to sponsor them. PEB program targets underrepresented populations by affording students the opportunity to complete one year of RTI and connecting them to employment. This offers individual students a jumpstart on their journey to a successful job in the trades. [34]

All Delaware vocational-technical (Vo-Tech) high schools offer career pathways in the construction trades. New Castle County Vo-Tech high schools offer career programs offer in construction technologies including building automation, carpentry, electrical trades, heating ventilation & air-conditioning, welding/fabrication technology, industrial mechanics/millwright technologies, masonry, plumbing, and sheet metal fabrication.[35] POLYTECH High School's Industrial Technology Academy offers students the opportunity to study automotive body repair, automotive technology, building construction, electrical trades, masonry, and welding & fabrication. [36] Sussex Tech includes technical areas such as automotive technologies, carpentry and construction management, collision repair technologies, electronics, electrical and green energy technologies, and HVAC-R engineering.[37] Embarking on a career in the construction trades while still in high school can make it more likely that women and girls will continue into an apprenticeship program.

As indicated previously, the percentage of Delaware girls in a career pathway related to construction trades is considerably higher than women participating in the Registered Apprenticeship program. The stark difference (20% of the total enrollment in trades programs in technical schools compared to 3% of registered apprentices that are women) highlights a disconnect between a chosen program of study in high school and applying for an apprenticeship program.



WOMEN FACE SEVERAL CHALLENGES TO SUCCESS IN THE CONSTRUCTION TRADES

Given the nationwide need for more skilled trades workers, there are incentives to highlight these careers and expand opportunities to women and people of color. Despite the demand and benefits of integrating more women into the skilled trades, there are barriers to entry that remain. Women are often the only one of their gender in a trades class, apprenticeship, or on a job site. This isolation can lead to the feeling of being under scrutiny. Moreover, there are several barriers which prevent women from entering the construction trades. One such barrier could be gender-based discrimination. Whether being subject to stereotypes that they lack the experience or strength to do the job, or sexual harassment, women can face the impossible choice of not reporting the discrimination they have experienced or leaving their apprenticeship. While not every woman will experience discrimination, and most reputable employers work hard to ensure that employees are treated fairly, research has shown that women face difficulties in the industry. A recent series of interviews with more than 40 tradeswomen from across the country revealed disturbing anecdotes involving “men grabbing and groping women with impunity, women being told to go home and work in the kitchen, female workers being given the most dangerous jobs and the jobs that kept them from learning valuable skills necessary for their careers.”[38] The interviews also highlighted common themes among the women who spoke up about abuse and discrimination and negative experiences of having their tools stolen or destroyed, being excluded from certain jobs, or denied access to any job at all. [39]

Workers report a phenomenon referred to as “checkerboarding.” Checkerboarding occurs when an apprentice is moved from job to job to fulfill hiring goals but is laid off for long periods between jobs.[40] Apprentices receive on-the-job training. Any disruption in training, or a lack of training, makes it difficult for the apprentice to develop and learn the required job skills. Furthermore, a report by the North America’s Building Trades Unions (NABTU) Tradeswomen Committee indicates that “while wage rates are the same regardless of gender, race, and ethnicity, tradespeople can still experience discrimination in the hiring and layoff processes. Through this discrimination, women and people of color may not accrue as many work hours as their white male counterparts, which has consequences for their total pay as well as their eligibility for health and retirement benefits.”[41]

In addition to discrimination, women tend to contribute more unpaid labor to the household including time spent on childcare, routine housework, elder care, and other household maintenance. Family-friendly work policies are crucial to finding a work-life balance. Male-dominated industries typically see less need to offer the type of flexibility needed by working parents.[42] Additionally, many apprenticeship programs require on-the-job training during the day and training classes in the evening. While children may be in school or childcare during the day, the availability of evening childcare is rare and an added expense.

In addition to classes held in the evening, work on the job site typically begins very early, often before most childcare centers open. An imbalance in caregiving responsibilities can lead to fewer options for women to pursue certain opportunities. Ensuring that women have access to trades pathways in high school and apprenticeship programs at the postsecondary level, as well as the necessary supports to be successful in such a program, is crucial to increasing the number of women entering the construction trades.

Interestingly, despite the barriers and differential treatment, the interviews revealed that these women loved their jobs, including aspects such as pay and benefits, the skills gained, and the actual work involved in their trade.[43]



RECOVERY EFFORTS SHOULD INCLUDE WOMEN TO HELP OFFSET LABOR SHORTAGES AND AN AGING CONSTRUCTION WORKFORCE

Many important equity issues including inadequate family-friendly work policies, insufficient availability of quality child care, and persistently low wages in predominately female job sectors, all issues that existed well before the pandemic, have been brought more sharply into focus. Nationally, millions of women left the workforce due to caregiving demands or unemployment in female-dominated fields. Without intervention, such as employer support or increased training programs, women’s participation in the labor force could continue to decline, with participation already at historic lows.[44]

Ongoing recovery efforts can provide an opportunity to create additional programs and policy changes that can not only increase the number of women in the construction trades but help to stabilize labor force participation. With Delaware expecting to receive more than \$2 billion through the Bipartisan Infrastructure Law, including significant new investments in road and bridge repairs, broadband expansion, clean water projects, and electric vehicle infrastructure, now is the time to act so more women can take advantage of high-paying construction industry jobs.

92%

contractors report some level of difficulty finding skilled workers.

Construction businesses will need to hire **430,000** workers this year and **1 million** more over the next two years.

Source: Associated Builders and Contractors

The construction industry has also been affected by the pandemic. The U.S. Chamber of Commerce's most recent quarterly construction report (September 2021), states, "Almost all (92%) contractors report some level of difficulty finding skilled workers, but this quarter, 55% indicate high levels of difficulty—a jump of 10 percentage points from Q2. The lack of workers has caused 42% of those contractors to turn down work, up from 35% in Q2." [45] Further reporting indicates that "in an industry already short on workers before the pandemic, construction businesses will need to hire 430,000 workers this year and one million more over the next two years in order to keep up, according to Associated Builders and Contractors." [46] Additionally, while other industries are also experiencing labor shortages, data from the BLS shows that construction pays nearly double the average hourly wage of those working in hospitality or restaurants, illustrating that the wage may not be the issue. [47] Part of the issue may be that the construction trades have an aging workforce. BLS data shows that in Delaware, the average age of those working in construction occupations such as carpenters (age 42), electricians (age 46), maintenance and repair workers (age 59), HVAC installers (age 42) and many other occupations, is over the age of 40. [48] Other research concurs that nationally, "roughly 40% of all workers in the industry are 45–64. The number of older workers is going up and the number of young workers is going down." [49] The same report continues, "The Bureau of Labor Statistics estimates that between now and 2026, the construction industry will see major growth and as many as 747,600 new jobs." [50] Given that women have left the workforce in record numbers and the industry is confronting growing labor shortages, this is a historic opportunity to address the need to improve the economic security of Delaware women and fill the needs of an aging, short-staffed industry.



PROMISING PRACTICES AND RECOMMENDATIONS

The State of Delaware's Department of Labor and the Department of Education provide opportunities for those looking to enter the trades. However, as the data has illustrated, very few women and girls participate in the programs. While there have been numerous efforts to engage more women and girls in the programs, barriers such as discrimination, stereotyping and the need for additional supports may be preventing them from choosing these occupations.

The data is clear that there are not enough Delaware women and girls pursuing or working in the construction trades. Research indicates that a job in the construction trades can provide a family-sustaining wage and a meaningful career. Steps can be taken to address the barriers faced by women interested in obtaining work in the construction trades and increase the number of women in apprenticeship programs. Building on promising practices, the following recommendations could begin to address Delaware's lack of women in the construction trades.

RESTRUCTURE FUNDING FOR THE REGISTERED APPRENTICESHIP PROGRAM

The state's Registered Apprenticeship program currently operates jointly between the Delaware's Department of Labor and the Department of Education. The program is designed to expand student and employer participation in the state's Registered Apprenticeship system by offsetting the cost of related education and training to upskill Delaware workers. The current funding provides roughly \$1,050 per apprentice. However, the actual cost to train an apprentice exceeds the available funding. Therefore, the Vo-tech school system should explore additional funding to cover the entire cost. Without sufficient funding, there could be an unfavorable increase in class size or the need to cancel class altogether. The difference in cost to train an apprentice has been addressed through temporary competitive federal funds; however, the continued acquisition of competitive federal funds is neither predictable nor sustainable. Therefore, it is recommended that a new formula-based fiscal model associated with increased enrollment in Registered Apprenticeship be considered to replace the current funding structure. Funds would be allocated to education and training providers that support the State Registered Apprenticeship system on a per apprentice basis. Funds could be allocated like other state scholarship programs, such as Delaware Technical Community College's expanded Student Excellence Equals Degree (SEED+) program and Delaware State University's Inspire scholarship. Preliminary research by the Delaware Department of Education found that changing the funding structure of the apprenticeship program has the potential to impact 1,500+ apprentices immediately, with planned growth of more than 500 apprentices in the next five years. Doing so can expand apprenticeship opportunities, improve engagement with employers to create new and expanded apprenticeship programs, and increase the number of young people entering the apprenticeship system during high school or immediately thereafter. A change in funding structure means that more resources can be allocated to not only increasing the number of apprentices but more strategic outreach that can diversify the pool of applicants.

CREATE A PRE-APPRENTICESHIP PROGRAM FOR DELAWARE WOMEN

Pre-apprenticeship programs are a promising best practice for increasing the number of women in construction trades. The Delaware Department of Labor currently has the structure and policy for pre-apprenticeship programs in place, but there is no regular funding mechanism for this explicit purpose. Pre-apprenticeship programs designed for women can address the unique needs and barriers they face and better prepare them for a future in both an apprenticeship program and a career in the construction trades. Research shows that “pre-apprenticeship programs can provide women with the foundation skills, supports, networks, and knowledge needed for entering and succeeding in an apprenticeship.”[51] Pre-apprenticeship programs utilize a set of strategies that can prepare participants for a Registered Apprenticeship program. Such programs are typically a few months in duration, consist of women-only cohorts, include training based on industry standards, provide hands-on opportunities to learn more about the work expected during an apprenticeship, and offer mentoring from women in the field.[52] According to the National Center for Women’s Equity in Apprenticeships and Employment, an initiative of the Chicago Women in the Trades, there are several successful uses of pre-apprenticeship programs that have increased the number of women in apprenticeship programs in construction trades.[53]

Successful Pre-apprenticeship Programs

- In Illinois, women’s share of registered apprenticeships is twice the national average. Pre-apprenticeship programs in Chicago have led to particularly impressive results with the women’s percentage of laborers at 12%, Iron Workers #63 at 10%, and the carpenters at 8%.
- In New York City, home of the Nontraditional Employment for Women (NEW) pre-apprenticeship program, 11% of apprentices in the construction industry are women.
- In Oregon, home of Oregon Tradeswomen (OT), the number of women in apprenticeships is twice the national average, and a quarter are women of color. Successful programs include carpenters and electricians leading to 9% and 12.2% of those apprenticeships being women.

Source: National Center for Women's Equity in Apprenticeship and Employment[54]

Research has shown that pre-apprenticeship programs have had proven success increasing the number of women entering apprenticeships. Pre-apprenticeship programs made of all-women cohorts that include wrap-around support services such as childcare, case management, and transportation in addition to skill building and apprenticeship exploration, have seen huge results in improving access and successful completion of apprenticeship programs. Delaware should expand the use of pre-apprenticeship programs, increase the number of all-women cohorts, and provide additional opportunities for women to learn while on the job site. It is critical to long-term success that women have the support and comradery of other women in jobs typically dominated by men.

CREATE A PRE-APPRENTICESHIP PROGRAM AT THE BAYLOR WOMEN'S CORRECTIONAL INSTITUTION

The Baylor Women's Correctional Institution (BWCI) annually serves over 400 students through the Delaware Department of Education's Prison Adult Education program.[55] Given the typical length of stay at BWCI and the large number of residents awaiting trial, the number of students enrolled in a program over the course of a year can be higher than the total population at any one given time. In addition to academic and life skills classes, a variety of vocational courses are also offered to prepare offenders for employment upon release. In fact, the most recent data available show that the vocational classes at BWCI have the highest enrollment rates across the prison system with 245 BWCI women enrolled in classes such as flagger certification, culinary arts, ServSafe, coding, Aller-Train and Microsoft Office skills.[56] Recent data also show that the vocational programs at BWCI have a 99% completion rate, higher than any other prison in the state.[57] Given the success of current programming at BWCI, considerations for how to integrate the Prison Adult Education programs with the Department of Labor's Registered Apprenticeship program should be explored. For example, the Washington Corrections Center for Women partners with unions representing the construction trades to run the Trades Related Apprentice Coaching (TRAC), a program that operates inside the prison.[58] Such a program operates as a pre-apprenticeship program that helps to prepare women for apprenticeships after release. Creating a pre-apprenticeship program at BWCI can provide women that are typically in the institution for just a few months with longer-term connections to construction industries. Preparing women at BWCI with the knowledge and skills needed to enter the construction industry as an apprentice can not only assist with job placement but even reduce recidivism.[59] Additionally, the lack of space available at BWCI has an impact on the programming that can be offered to residents. Given the space constraints of the institution, additional funding for modular trailers that can be utilized for education programs, such as a trades pre-apprenticeship program, should be considered.

CREATE A STATEWIDE WOMEN'S COMMITTEE

Given the low number of women in apprenticeship programs or occupations in the construction trades, it is commonplace that there is only one woman in a training class or on a job site. It can be challenging to navigate spaces dominated by men and intimidating to consider entering such a field. At the high school level, there are more girls studying the construction trades which means that there typically are more girls in each class. However, given the lack of women pursuing an apprenticeship in the construction trades, it is more likely that a woman in the program may be the only woman on the job site, which can contribute to the likelihood that she may not continue. Women's committees can provide the opportunity for tradeswomen to not only support one another, but also provide mentoring and assistance to women considering an occupation in the construction trades.

The solidarity achieved through women's committees allows women to find and share common experiences. The Delaware Department of Labor should work with entities such as the Apprenticeship and Training Council, or similarly appropriate organizations to identify women apprentices or journeymen in the construction trades and assess interest in creating a women's committee. With such small numbers of women working in the construction trades in Delaware, the state should explore existing models where women from several employers form one committee that would meet regularly and provide opportunities for women to solicit or give advice, learn more about occupations in the trades, and network within their industry.

Women's committees can be beneficial in the following ways: [60]

- **Information Sharing-** It's hard to imagine being something that you can't see. Many women's committee members participate in community events such as career fairs and training events to show other women what is possible and share their experiences. Hearing directly from women that have successfully navigated an apprenticeship or work as journeywomen can help women see that a career in the construction trades can provide a family-sustaining wage and meaningful work. Hearing such perspectives helps to encourage women to pursue a career they hadn't previously considered.
- **Improving Access to Apprenticeships-** Women's committee members also serve as an important support to women interested in apprenticeship programs by working to educate women about the apprenticeship process. Improving access to apprenticeship programs can include building understanding about the requirements of the program such as how and when to apply, assisting with connections in the industry, and providing one-on-one support at each step in the process. Having the guidance of women that understand the unique environment of being a woman in a male-dominated field can help demystify common assumptions about working in the construction trades and make the path to entering the industry a little easier.
- **Mentoring & Leadership Building-** In addition to making women in the trades more visible and assisting women into apprenticeships, women's committees also serve as the central place where women can come together and share their experiences. Whether a woman is just starting out in pursuing a construction trade or an experienced journeywoman, women's committees offer the opportunity to get advice from and commiserate with women that understand the uniqueness of being one of a very small number in their field.

Source: NATIONAL CENTER FOR WOMEN'S EQUITY IN APPRENTICESHIP AND EMPLOYMENT

STATE OF DELAWARE PARTICIPATION IN THE REGISTERED APPRENTICESHIP PROGRAM

According to the Delaware Department of Labor, there are currently over 400 employers registered with the State's Registered Apprenticeship Program. Additionally, several state agencies participate in the program including the Office of Management and Budget, the Department of Correction, the Delaware National Guard, the Delaware Department of Transportation, and the Delaware Hospital for the Chronically Ill. Since there are many jobs in state government that are considered construction trades including electricians, HVAC technicians, and mechanics, greater participation in the state's Registered Apprenticeship Program by state agencies can improve the pipeline that supplies new workers into these jobs. Therefore, exploring how the State of Delaware can streamline state agency participation in the State's Registered Apprenticeship program could not only lead to an increase in the number of apprenticeships but also use a targeted approach to bring more women into the program. The Department of Human Resources should evaluate current structures and pursue any necessary policy changes that would facilitate more participation in the Registered Apprenticeship program by state agencies.

CREATE A TASK FORCE DEDICATED TO INCREASING WOMEN WORKING IN THE TRADES

The issue of so few Delaware women and girls in construction trades is complex, with solutions that are wide-ranging and would require considerable coordination. A dedicated task force with representatives from state agencies including Delaware's Department of Labor and Department of Education, community organizations, unions and other industry partners, and other advocates can identify ways they can work together to increase the number of women working in the construction trades. Such a task force can establish specific goals related to increasing the number of women in the Registered Apprenticeship program as well as increasing the number of girls in construction-related career pathways. Two main issues the task force should consider are childcare supports and the number of women placed on job sites. For example, one such goal could be to require that women are placed on job sites to learn in cohorts. Employers should take at least three women apprentices at a time so that they are together and not the lone woman on the job site. Not being the only woman is crucial and makes a substantial difference in both learning and morale. Another issue the task force must address is the need for childcare supports given the irregular hours required both during an apprenticeship and on the job site. Construction workers often need early care to get to a job site on time and apprentices attend classes at night, requiring after-hours care. The need for childcare during irregular hours can be hard to find and very costly, creating a barrier to the construction trades that primarily affects women. The task force could investigate ways to alleviate the stress of securing childcare such as childcare subsidies during an apprentice's training period or other similar supports that would allow parents to participate in the program. Lastly, regular data collection related to Delaware women and girls working in the construction trades can also help to identify areas for improvement and provide an ongoing evaluation of the task force's efforts.

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